

- 1 1. A non-planar log-periodic antenna comprising two  
2 radiator arms oriented about a common axis with and  
3 enclosing a square pyramidal conductor with truncated tip.
- 1 2. An antenna as in claim 1 wherein the arms are low  
2 ohmic loss metal.
- 1 3. An antenna as in claim 1 wherein the arms are  
2 identical log-periodic shapes, inclined by less than 30  
3 degrees to each other, oriented to have 180 degree symmetry  
4 about the common axis.
- 1 4. An antenna as in claim 1 wherein said square pyramidal  
2 conductor comprises low loss metal.
- 1 5. An antenna as in claim 1 wherein the axis of the  
2 pyramid and said antenna arm pair are common.
- 1 6. An antenna as in claim 1 wherein the opening angle of  
2 said square pyramidal conductor is one half or less of the  
3 inclination angle of said antenna arms.
- 1 7. An antenna as in claim 1 wherein said square pyramidal  
2 conductor has identical projected extent along the common  
3 axis as said antenna.
- 1 8. An antenna comprising two antenna arms and an  
2 interior shield wherein the combination of said two antenna  
3 arms with said shield in the interior behaves as a  
4 log-periodic antenna.

1 9. A non-planar log-periodic antenna comprising four  
2 radiator arms oriented about a common axis and enclosing a  
3 square pyramidal conductor with truncated tip.

1 10. An antenna as in claim 8 further comprising a short  
2 wire attached to the narrow end of each of said antenna  
3 arms, at an endpoint of the antenna arm centerline, and  
4 threaded into said square pyramidal conductor through said  
5 truncated tip of said square pyramidal conductor.

1 11. An antenna as in claim 9 wherein the square pyramidal  
2 conductor is enclosed on four sides by four identical  
3 log-periodic antenna arms.

1 12. An antenna as in claim 9 having a configuration such  
2 that the entire structure behaves as a log-periodic  
3 antenna.

1 13. An antenna as in claim 9 further comprising a short  
2 wire attached to the narrow end of each of said antenna  
3 arms, at an endpoint of the antenna arm centerline, and  
4 threaded into said square pyramidal conductor through said  
5 truncated tip of said square pyramidal conductor.

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